

20-8292



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

~~POSITIVE RECALL~~

EFFECTIVE

RELEASED

AUTH

DATE

D2362-3

Job Sheet 211828

Part No: D2362-3

Job Qty: 6 pcs

Part Name: Step Support Bracket



Part Weight: 0 lbs

Job Created: 7/28/20

Due Date: 8/11/20

Type: SOLD

Status: New

Priority: Medium

Job Tracking No:

Created By: Jennifer Renwick

Description:

Note: D2362 REV.G IPP: G 00.05.18 Added inspection level 8 EC IPP REV:H 2020.01.13 AS PER DWG REV.F DD
VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	HAAS 4 Axis	6 pcs	8/10/20		1.00	1.51	HAAS - 1		
							HAAS - 2		
							HAAS - 3		
							HAAS - 4		
110	QC 2	6 pcs	8/10/20		0.00	0.00	QC 2 - 1		20/08/21
							QC 2 - 12		
							QC 2 - 14		20/08/21
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		



Container No: S291458



Part: D2362-3

Job No: 211828

Serial No/Batch: S291458

Revision: REV.G

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 08/01/20

Plex 7/28/20 1:18 PM Dart.Renwick.Jennifer

120 QC 8	6 pcs	8/10/20	0.00 0.00	QC 2 - 8	
				QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
130 Small Fab - 2 - B4B	6 pcs	8/10/20	0.00 0.75	QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	DAS 52 7/20/20
				QC 8 - 23	9-89
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
				QC 8 - 66	
				QC 8 - 73	
140 Powdercoat - 1 White GI(A)- B4B 11254469	6 pcs	8/10/20	0.00 0.22	QC 8 - 82	
				Small Fab - 1 - B4B	DAS
				Small Fab - 2 - B4B	58 AUG 04 2020
				Small Fab - 3 - B4B	9-89
				Small Fab - 4 - B4B	
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
				Small Fab - 8 - B4B	
				Small Fab - 9 - B4B	
140 Powdercoat - 1 White GI(A)- B4B 11254469	6 pcs	8/10/20	0.00 0.22	Small Fab - Various 1 - B4B	
				Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	
				Powdercoat - 3 - B4B	
				Powdercoat - 4 - B4B	
				Powdercoat - 5 - B4B	
				Powdercoat - 6 - B4B	
				Powdercoat - 7 - B4B	

				Powdercoat - 8 - B4B	
				Powdercoat - 9 - B4B	
				Powdercoat - 10 - B4B	
150 QC 3	6 pcs	8/10/20	0.00 0.00	QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	DAS AUG 0 6 2020
				QC 3 - 58	58
				QC 3 - 59	89
				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
				QC 3 - 61	
				QC 3 - 81	
				QC 3 - 82	
				QC 3 - 87	
160 Small Fab - 3 - B4B	6 pcs	8/11/20	0.00 0.75	Small Fab - 1 - B4B	
				Small Fab - 2 - B4B	
				Small Fab - 3 - B4B	
				Small Fab - 4 - B4B	AUG 0 6 2020
				Small Fab - 5 - B4B	
				Small Fab - 6 - B4B	
				Small Fab - 7 - B4B	
				Small Fab - 8 - B4B	
				Small Fab - 9 - B4B	
				Small Fab - Various 1 - B4B	
170 QC 5	6 pcs	8/11/20	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	DAS
				QC 5 - 22	81
				QC 5 - 24	89
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
				QC 5 - 82	

180 Packaging 3-1 - Stock - B4B	6 pcs	8/11/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	DAS
				Packaging 3 - 6 - B4B	28
				Packaging 3 - 7 - B4B	9-89
				Packaging 3 - 8 - B4B	AUG 07 2020
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	AUG 10 2020
190 QC 21 - SA	6 pcs	8/11/20	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21
				QC 21 - SA - 9	9-89
				QC 21 - SA - 77	

Part Op 100 - (HAAS CNC vertical machine #1) 1- Mill as per Folio FA800 Rev: AC & Dwg D2362 Rev: G 2-Deburr per Descriptions: dwg D2362

110 - (QC2- Inspect parts off machine FAI/FAIB)

120 - (QC8- Inspect parts - second check)

130 - (Small Fab) Deburr

140 - (White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum) START TIME: _____ FINISH TIME: _____

150 - (QC3- Inspect Part Finish)

160 - (Small Fab) Bond rubber D2397-1 followed by D2397-3 using contact cement as per Dwg D2362

Batch 5252508 up: 01/31/21

170 - (QC5- Inspect part completeness to step on W/O)

180 - (Identify as per dwg & Stock Location: _____)

190 - (QC21- Final Inspection - Work Order Release)

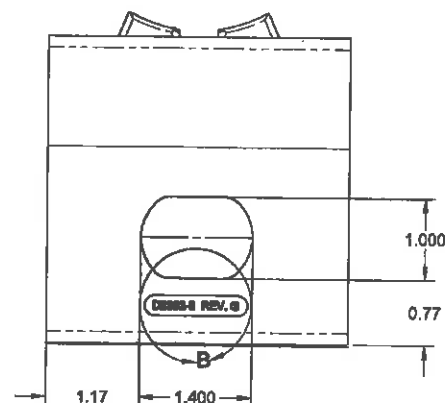
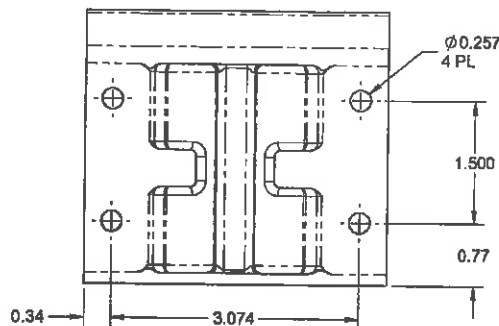
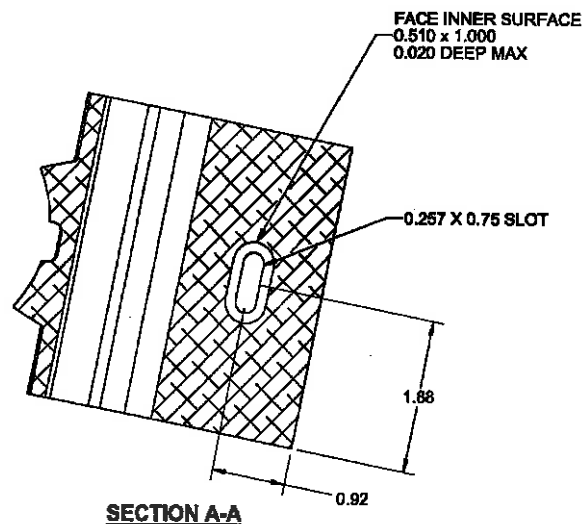
Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2265	Step Bracket	6 pcs (1 ea)	100-HAAS 4 Axis	
D2397-1	Rubber Cushion	6 pcs (1 ea)	160-Small Fab - 3 - B4B	
D2397-3	Rubber Cushion	6 pcs (1 ea)	160-Small Fab - 3 - B4B	

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-HAAS 4 Axis	D2265	6	8	0
160-Small Fab - 3 - B4B	D2397-1	6	12	0
	D2397-3	6	12	0
Part Specifications				
Specifications could not be found.				

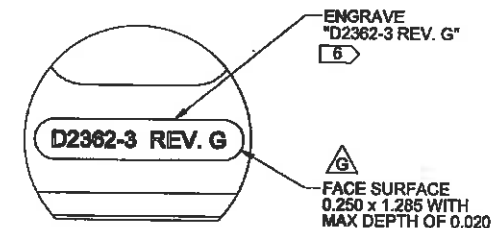
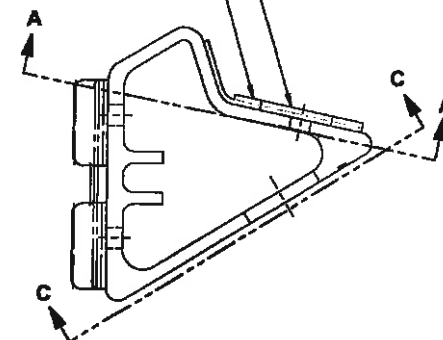
Plex 7/28/20 1:18 PM Dart.Renwick.Jennifer

QTY 3	P/N	DESCRIPTION
X	D2362-3	STEP SUPPORT BRACKET
1	D2285	STEP SUPPORT CASTING
1	D2397-1	RUBBER CUSHION
1	D2397-3	RUBBER CUSHION



CENTER D2397-1/-3 RUBBER
HOLE WITH SLOT AND BOND
WITH CONTACT CEMENT PER
MANUFACTURER'S SPECIFICATION

D2397-1 RUBBER CUSHION
D2397-3 RUBBER CUSHION



D2362-3 STEP SUPPORT BRACKET

NOTES:

- 1) MATERIAL: MAKE FROM D2285
- 2) FINISH: POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3 BEFORE BONDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.3 WITH 0.13 HIGH LETTERS, 0.010 DP, AND R0.010 MIN TOOL RAD
- 7) WEIGHT: 0.86 lbs

RELEASED

2020 MAY 06
2020-05-06

APPROVED

DESIGN SAD
DRAWN SAD
CHECKED RF
MFG. APPR. DD
APPROVED NO
DE APPR. CP

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.

D2362

TITLE

STEP SUPPORT BRACKET

REV. G

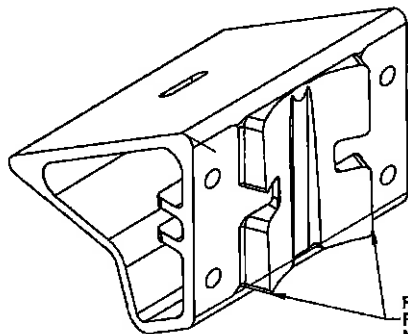
SHEET 1 OF 3

SCALE

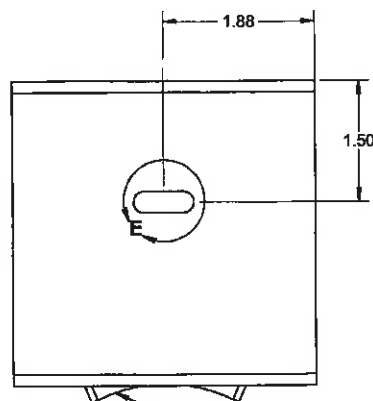
NTS

DATE 20.02.19

DATE 20.02.19

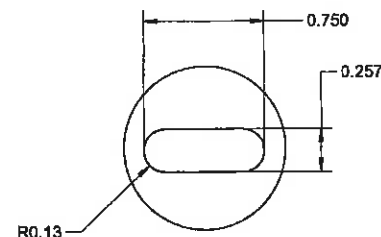


REMOVE TIPS
FROM CASTING
MAX 0.080

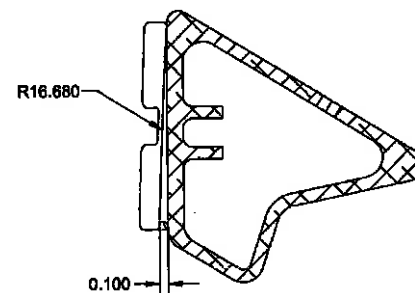
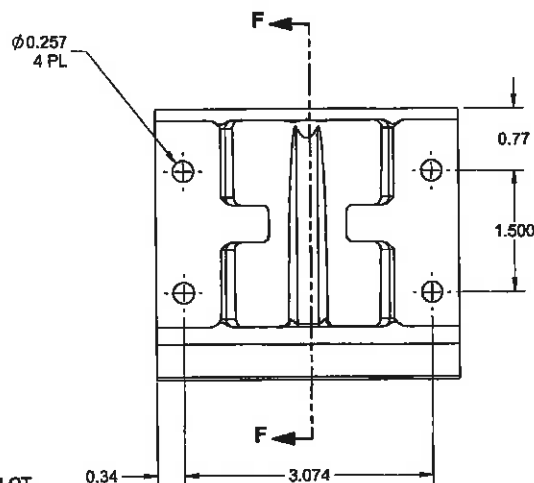
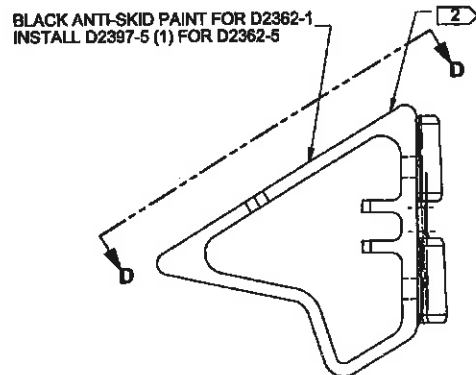


VIEW D-D

MACHINE TO
R1.100
(TYP 2 PL)



DETAIL E



SECTION F-F

NOTES:

- 1) MATERIAL: MAKE FROM D2265 CASTING
- 2) FINISH: D2362-1: BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
D2362-5: INSTALL D2397-5 RUBBER CUSHION. ALIGN HOLE WITH SLOT
AND BOND USING CONTACT CEMENT PER MANUFACTURER'S SPECIFICATION
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BEFORE ANTI-SKID PAINT OR BEFORE INSTALLING D2397-5
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
- 7) WEIGHT: 0.76 lbs

D2362-1 AND D2362-5 STEP SUPPORT BRACKET

RELEASED

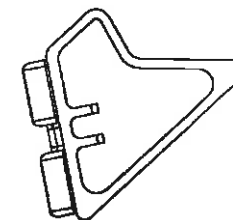
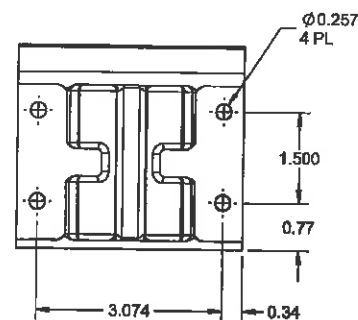
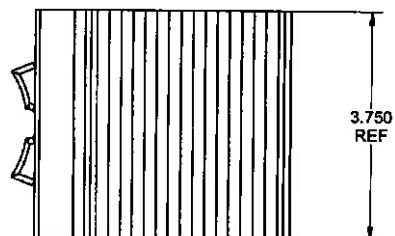
2020 MAY 06
Rev 2 of 3

APPROVED

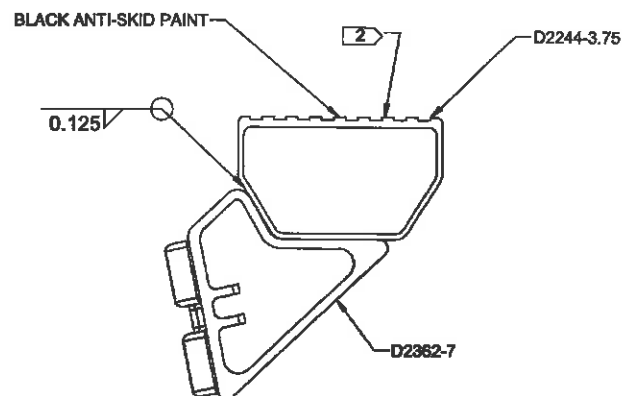
DESIGN	SAD
DRAWN	SAD
CHECKED	RF
MFG. APPR.	DD
APPROVED	NO
DE APPR.	CP
DATE	20.02.19

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D2362	REV. G SHEET 2 OF 3
TITLE STEP SUPPORT BRACKET	
SCALE NTS	
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QTY -041	P/N	DESCRIPTION
X	D2362-041	PRE-FLIGHT STEP
1	D2362-7	STEP SUPPORT BRACKET
1	D2244-3.75	STEP EXTRUSION

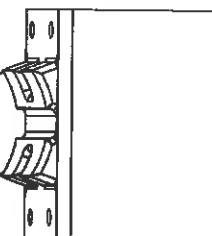


D2362-7 STEP SUPPORT BRACKET



D2362-041 PRE-FLIGHT STEP

REMOVE TIPS
FROM CASTING
MAX 0.080



NOTES:

- 1) MATERIAL: MAKE D2362-7 FROM D2265 CASTING
- 2) FINISH: POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
APPLY BLACK ANTI-SKID PAINT TO TOP SURFACE OF STEP PER QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
- 7) WEIGHT: 1.18 lbs
- 8) WELD PER DART QSI 004

RELEASED

2020 MAY 06

APPROVED

DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE 20.02.19

SAD
SAD
RF
DD
NO
CP

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.
D2362

TITLE
STEP SUPPORT BRACKET

REV. G
SHEET 3 OF 3
SCALE
NTS

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Under Review Notification

Raised By: Steven Drouin

Date: 19.03.13

Product #: D350-591

Product Name: HELI-ACCESS-STEP

Part Number (D-Part and 9-Digit) (eg. D3535-11) (eg. D3535-25) (eg. D206-642-143) (eg. RBEM324U3010101-1)	Drawing or Document & <u>Current</u> Affected Revision for each part listed	"Y" or "N" Required for Each Part Do not leave blank							Reserved ECN / URF Log Number	Instructions Relevant to Each Part (including whether CHG #'s will be affected)
		DO NOT SHIP	Red Tag/Quarantine Stock	Advise Customers	Hold all Production	Re-Work Stock	IPP Under Review (Engineer Signoff Required.)	Put Product Specifications Under Review ("Bluefiles")		
D350-591-113	IIN-D350-591 Rev.I	Y	Y	N	Y	N	Y	Y	19-637	CHG#005
D350-591-117A	IIN-D350-591 Rev.I	Y	Y	N	Y	N	Y	Y	19-637	CHG#003
D350-591-119	IIN-D350-591 Rev.1	Y	Y	N	Y	N	Y	Y	19-637	CHG#004
D2362	D2362 Rev.E1	Y	Y	N	Y	Y	Y	Y	19-637	Drawing update
D2275	D2275 Rev. C	Y	Y	N	Y	Y	Y	Y	19-637	Drawing update

Description of Issue:

PARTS SHOULD BE INGRAVED WITH PART # AND REV F

D2362 SLOT DIMENSION ON STEP SUPPORT BRACKET NEEDS TO BE MOVED BY 0.060

D2275 NEEDS TO REDUCE CHAMFER ON BUSHING

D350-591-113 HOLE DIMENSION FOR BUSHING NEEDS TO BE REVIEWED

PLEASE SEE ENGINEERING FOR MORE DETAILS

REF:CAR19-305

Distribution:

VP Operations

Director of Operations

Director Quality Assurance

QC Coordinator

Director of Engineering

Chief Engineer

Engineering Project Managers

Engineering Clerk

Customer Support Manager

Production Engineers

Production Planners

Purchasing Manager

Technical Support

Product Manager - Solutions Provider

Supply Chain Director / Senior Buyer

Marketing Eugene

Entered: LE Date: Aug 14/2020



NCR No. 20-8292

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only

Job: 211828		DISPOSITION		DEPARTMENT/PROCESS							
Part No. 02362-3		Rework ☐ Scrap ☐ Use-as-is ☒		Skid-tube ☐ Machining ☐ Large Fab ☐		Cross tube ☐ Small Fab ☐ Finishing ☐		Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐		Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☒	
Date: 20/7/28		Sequence #: 100		QTY Affected: 6				MRB (QSI042)			
Description Work Order Deviation				Disposition				INSP 12 20/7/28			
02265 PARTS WERE QUARANTINED FOR SURFACE GRINDING BY SUPPLIER.				PARTS WERE TESTED BY ENGINEERING AND ARE ACCEPTABLE.				Completed By 20/7/28			
								Lead hand / Supervisor 20/8/01			
								QC / QA Coordinator DAS 9 20-8-14			
Root Cause		FAULT CATEGORY									
Operator ☐		☐ Pressure/Forced		☐ Contamination		☐ Power Loss/Surge		☐ Positioned Wrong			
Manufacturing Process ☒		☐ Bending		☐ Misaligned/off center		☐ Folio/Program		☐ Outside Tolerance			
Equip/Tooling ☐		☐ Crushing		☐ BOM/Route		☐ Grain Direction		☐ Drawing			
Handling/Preservation ☐		☐ Cracks		☐ Broken/Damage/Defect		☐ Weld		☒ Finish			
Material ☐		☐ Crimp/Kink/Ripple/Wave/Twist		☐ Incomplete/Unclear Instructions		☐ Wrong Stock Pulled		☐ Part Lost/Missing			
Product Improvement ☐		☐ Marks/Chatter		☐ Drill Holes		☐ Out of Sequence		☐ Misread			
Process Improvement ☐		☐ Mislabeled		☐ Fit/Function		☐ Off-set/Set-up					
Human Factors ☐		Other/Details:									